

REMARKS

In response to the restriction requirement of record, applicant confirms the election made to species v, claims 1, 10, 14, 15 and 17. Claims 2-9, 11-13, and 16 are withdrawn as being drawn to nonelected claims.

The examiner has raised an issue of double patenting in claims 14 and 17, based on claim 1. The examiner notes that the differences recited in these claims are statements of “intended use” and are not given patentable weight. Furthermore, the remaining claims have been rejected under 35 U.S.C. Sec 102(b) as being anticipated by Hung, Hill or Pitts.

The present invention focuses on a lateral surge phenomenon that arises below wave action, as represented in Figures 4a and b of the specification. In contrast to other structures that rely on bending action applied to a transducer by the wave, the present transducer sits on the ocean floor and responds to this lateral surge, in a rapid, abrupt sequence unlike water movement associated with tides and ocean currents. Such surges operate at a frequency that corresponds to the wave frequency above, many time greater than the ebb and flow of tide.

Each of the independent claims has now been amended to further limit the invention specifically to structure particularly suited to the unique environment associated with the wave-induced water surge at the ocean floor. For example, ground stabilizing structure as described on page 6 of the specification is necessary to counter the force of the somewhat rapid water surge from the wave action. Accordingly, claim 1 has been amended to define a mounting base that “includes stabilizing structure capable of resisting a water surge resulting from overhead wave displacement that generates reciprocating lateral water displacement...in response to a pressure differential caused by the wave action.”

This is a different environment than with water movement associated with ocean currents or tides. Ocean currents may change direction; however, this occurs in a gradual manner which in no way resembles the reciprocating surge as illustrated in Figure 4. Similarly, ocean tides move in a gradual manner that does not require the stability of a transducer being thrust back and

forth in a matter of seconds, with variable frequency and amplitude.

Similarly, the electro-mechanical transducer as presently claimed includes “resistance elements responsive to the reciprocating water surges in a back and forth movement along the flow path...” Here again, this dynamic environment is unique to the wave-generated surge occurring in response to the pressure differential of over head waves.

None of the prior art cited by the examiner relates to this unique environment. Neither is there a clear teaching of structure in the mounting base or transducer that falls within newly amended claim language. Specifically, the Hill and Pitts references teach transducer devices that farm energy from an ocean current or other directional water movement. Although there is capacity for following a shift in direction, no structure is suggested that could rapidly respond to the “back and forth” movement of the subject wave surge. Whereas tide and ocean current directions change in a time domain of minutes and hours, the rapid wave surge of the present invention occurs in seconds. Neither of these references contemplates this unique approach to harvesting energy from waves, nor do they teach structure that is prepared to facilitate such a response.

The Hung patent teaches a device for use in any fluid environment, including air, wind, or water. Although this device is more capable of responding to shifting directions of fluid flow, there is no suggestion that it should be applied to a motion contemplated for the wave surge as presently claimed. Generally, this transducer is designed to accept a shifting direction, such as when wind or other fluid movement rotates around the transducer, as mounted to a building or vehicle.

Water applications again are limited to currents and tides, not to wave-induced surges at the ocean floor. This is evident from the illustrations of forces shown in the drawings and description, which forces consistently move along a primary direction—not in an abrupt back and forth manner. Furthermore, the hinged elements D are not suited for efficient operation in a back-and-forth force displacement. These plates are adapted to allow the water or fluid

movement to gradually change direction and still capture the force on the plates.

With respect to the Thershein and Carroll patents, neither provides disclosure that overcomes the deficiencies of the primary references cited. Accordingly, applicant requests reconsideration of the rejections and allowance of the claims as amended.

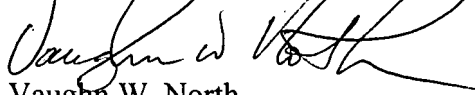
CONCLUSION

In light of the above, Applicant respectfully submits that pending claims 1, 10, 14, 15 and 17 are now in condition for allowance. Therefore, Applicant requests that the rejections and objections be withdrawn, and that the claims be allowed and passed to issue. If any impediment to the allowance of these claims remains after entry of this Amendment, the Examiner is strongly encouraged to call Vaughn W. North at (801) 566-6633 so that such matters may be resolved as expeditiously as possible.

The Commissioner is hereby authorized to charge any additional fee or to credit any overpayment in connection with this Amendment to Deposit Account No. 20-0100.

DATED this 26th day of April, 2007.

Respectfully submitted,



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